

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the following reasons.

Claims 10 and 15 are requested to be cancelled. Claims 1-9, 11-14, 16-17 and 19 are being amended. Claims 20-24 are being added. In conjunction with these changes, a detailed listing is presented of all claims, with an appropriate defined status identifier, that are or were in the application, irrespective of whether the claim(s) remain under examination.

Support for the claim amendments and new claims is found generally throughout the specification, e.g., on page 10, lines 6-10 and page 13, lines 6-10 and in original claim 11. With amendments as set forth above, claims 1-9, 11-14 and 16-24 will be pending.

I. Rejection of claims 1 – 19 under 35 U.S.C. § 112, second paragraph

In item 3, on page 2 of the office action, the examiner has rejected claims 1 – 19 as allegedly being indefinite. Applicants respectfully traverse the rejection in light of the amendments to claims 1, 8, 9, 12, 16, 17 and 19.

Applicants have amended claim 1 such that it is clear that what is meant by “the compounds I and II,” “said compound II,” and “the radicals.” It is clear from amended claim 1 that:

- (a) “the compounds I and II” refers to modified silanediols of the general formula I and organically modified silanes of the general formula II, respectively;
- (b) “said compound II” refers to organically modified silanes of the general formula II; and
- (c) “the radicals” refers to the groups Ar, R and R’ on the silanediols of the general formula I and on the organically modified silanes of the general formula II.

Also, since claim 1 no longer recites “the monomers” and “wherein the molar ratio of the compounds I and II in relation to the monomers is 1:1” any issues relating to those terms, enunciated in this office action, are now moot.

In claims 16, 17 and 19, it is clear that “the compounds I and II” refers to modified silanediols of the general formula I and said organically modified silanes of the general formula II, respectively.

The examiner notes that in claims 2 – 5 there is insufficient antecedent basis for “said compound of the general formula II.” Applicants have amended claims 2, 3, and 4 such that there is no lack of antecedent basis for “said compound of the general formula II.” Applicants have also amended claims 8, 9 and 12 such that there is no lack of antecedent basis in those claims for “said radical Ar,” and for “said radical R of the general formula II.”

Applicants have cancelled claim 10. Consequently, any issues relating to the term “the radical R” in claim 10 are now moot.

The amendments to claims 1, 8, 9, 12, 16, 17 and 19 and the cancellation of claim 10, overcome the rejection of claims 1 – 19. Reconsideration and withdrawal of the rejection are respectfully requested.

II. Rejection of claims 1 – 18 under 35 U.S.C. § 112, second paragraph

In item 4, on page 3 of the office action, the examiner states that she is not sure exactly what limit is set by the phrase “obtainable by” which appears in claims 1, 6, 7, 13, and 17. Applicants have amended claims 1 and 17 such that they do not recite “obtainable by” and instead recite “produced by”—a term that applicants believe will add clarity to the scope of claims 1 – 18.

Applicants confirm the examiner’s interpretation of the term “organically modified” to mean that the silicic acid polycondensate has organic groups attached to it.

Applicants have amended claims 1 and 14 such that they do not recite “stable in storage,” and “NIR permeable.” Consequently, any issues relating to the phrase “stable in storage” and the term “NIR permeable” in claims 1 and 14 are now moot.

Applicants have also amended claim 1 such that it no longer recites the term “photostructurable.” Consequently, any issues relating to the term “photostructurable” in claim 1 is now moot.

In item 4, on page 5 of the office action, the examiner has inquired as to the

differences between claims 1 and 17 and has stated that those claims are duplicates of one another. It should be clear now that amended claims 1 and 17 are different in that claim 1 is more specific than claim 17. Claim 1 recites the presence of a photoinitiator, whereas claim 17 does not. In short, claim 1 and 17 are clearly not duplicates of one another.

Since applicants have addressed all of the issues which the examiner raises in item 4 of the office action, the rejections raised in item 4 are overcome. Reconsideration and withdrawal of the rejections enunciated in item 4 are respectfully requested.

III. Rejection of claims 10 and 15 under 35 U.S.C. § 112, second paragraph

The rejection of claims 10 and 15 in items 5 and 6 of the office action are moot in light of the cancellation of those claims. Reconsideration and withdrawal of the rejection of claims 10 and 15 are respectfully requested.

IV. Non-restriction of the claims in this application

In item 7, the examiner states that the claims in this application were not restricted. Applicants acknowledge the examiner's statement.

V. Rejection of claims 2 – 3 under 35 U.S.C. § 112, second paragraph

In item 8, on page 7 of the office action, the examiner takes the position that claims 2 – 4 are confusing by virtue of the phrase “. . . wherein the molar ratio of said replaced compound II in relation to said compound III is 3:2.” While not acquiescing to the examiner's position, and simply in an effort to expedite the prosecution of this application, applicants have amended claims 2 – 4 such that it is clear what is the ratio of compounds used to produce the silicic acid polycondensate. Most notably, applicants have introduced simple equations into those claims that describe the ratio of each compound used to produce the silicic acid polycondensate. The amendments to claims 2 – 4 thus render the rejection of those claims moot. Reconsideration and withdrawal of the rejection are respectfully requested.

VI. Rejection of claim 5 under 35 U.S.C. § 112, second paragraph

In item 9, on page 8 of the office action, the examiner has rejected claim 5 because certain limitations (e.g., “one compound of general formula III”) allegedly lack antecedent basis. Claim 5, as amended, does not suffer from that problem. Consequently, the rejection of claim 5 has been overcome. Reconsideration and withdrawal of that rejection are respectfully requested.

VII. Rejection of claim 7 under 35 U.S.C. § 112, second paragraph

In item 10, on page 9 of the office action, the examiner has rejected claim 7 because certain limitations (e.g., “general formula III,” “IV,” “M,” “V,” “R¹,” and “R²”) allegedly lack antecedent basis. Claim 7, as amended, does not suffer from that problem. Consequently, the rejection of claim 7 has been overcome. Reconsideration and withdrawal of that rejection are respectfully requested.

VIII. Rejection of claim 11 under 35 U.S.C. § 112, second paragraph

In item 11, on page 9 of the office action, the examiner has rejected claim 11 because certain limitations (e.g., “V,” and “R¹”) allegedly lack antecedent basis. Claim 11, as amended, does not suffer from that problem. Consequently, the rejection of claim 11 has been overcome. Reconsideration and withdrawal of that rejection are respectfully requested.

IX. Objection to the Information Disclosure Statement (IDS) filed March 14

In item 12, on page 10 of the office action, the examiner has objected to the IDS filed March 14, 2004 because it allegedly fails to comply with the provisions of 37 C.F.R. §§ 1.97 and 1.98 and MPEP § 609.

As an initial matter, applicants note that there was a typographical error in the Form SB-08 filed with the IDS where applicants inadvertently listed “KNOLL, WALTER” as the author of the *Journal f. Prakt. Chemie* article listed on that form. The authors of that article are actually L. Haase and E. Klemm. In addition, applicants inadvertently listed the title of the *Journal f. Prakt. Chemie* article as “Chemie und Technologie der Silicon,” when the title of that article is “Synthese von Methacrol-yl-Spiroorthoestern.” The *Journal f. Prakt. Chemie* article by Haase and Klemm is, in fact, cited and described on page 16 of the specification, as

X. Rejection of claims 1, 10, and 12 – 18 under 35 U.S.C. § 102(b)

It is axiomatic that, for a prior art reference to be anticipatory, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

$$\text{H}_2\text{C}=\overset{\text{B}}{\underset{\text{O}}{\text{C}}}-\text{O}-\text{Q}'-\underset{\text{OR}'}{\overset{\text{OR}'}{\text{Si}}}-\text{O}-\left(\underset{\text{R}''}{\overset{\text{R}''}{\text{Si}}}-\text{O}\right)_n-\underset{\text{OR}'}{\overset{\text{OR}'}{\text{Si}}}-\text{Q}'-\text{O}-\overset{\text{O}}{\underset{\text{B}}{\text{C}}}=\text{CH}_2$$

(A)

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At column 4, lines 11 – 23, the Gutek reference states that the average value of n in compounds of the general formula (A) is less than 350. In addition, the Gutek reference states, in example 1, at columns 7 and 8, that the average value of y is 90 and that “ x had an average value of 30 and 6 parts wherein x had an average value of 300.” See column 7, lines 46 – 68. Lastly, claim 12 of the Gutek reference recites that the average value of y is 70 – 100 and the average value of x is 40 – 60.

Claim 1 *et seq.* recite that the ratio of modified silanediols of the general formula I to organically modified silanes of the general formula II in the resulting silicic acid polycondensate is 1 : 1. Since the Gutek reference discloses that average values of x and y are, at a minimum 30 and 70, respectively, the Gutek reference does not disclose silicic acid polycondensates where the ratio of silanediol to silane of 1:1. Thus, the Gutek reference does not disclose every element of the claimed invention and does not anticipate claims 1, 10, and 12 – 18. Reconsideration and withdrawal of the rejection are respectfully requested.

XI. Rejection of claims 1, 10, and 12 – 18 under 35 U.S.C. § 103(a) over Gutek

In item 16, on page 12 of the office action, claims 1, 10, and 12 – 18 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the teachings of the Gutek patent, *supra*.

In this context, the Examiner must present evidence of both (a) some suggestion or motivation to modify the reference or to combine prior-art teachings and (b) a reasonable expectation of success in such a modification or combination. In addition, the reference or references must teach or suggest each feature recited in the claim under consideration.

From the arguments presented in section X, above, it is clear that the Gutek reference does not provide a suggestion or a motivation for making a silicic acid polycondensate where the ratio of modified silanediols of the general formula I to organically modified silanes of the general formula II in the resulting silicic acid polycondensate is 1 : 1. Likewise, the Gutek reference does not teach or suggest each feature recited in the claims under consideration because Gutek does not teach or suggest values of x and y that would allow for a silicic acid polycondensate where the ratio of modified silanediols of the general formula I to organically

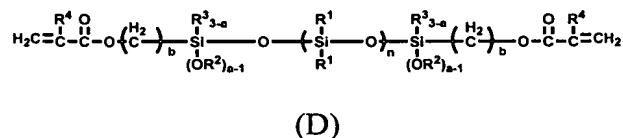
modified silanes of the general formula II in the resulting silicic acid polycondensate is 1 : 1. Thus, claims 1, 10, and 12 – 18 are not obvious over the teachings of the Gutek reference. Reconsideration and withdrawal of this rejection are respectfully requested.

XII. Rejection of claims 1, 10, and 12 – 18 under 35 U.S.C. § 103(a) over Fujioka

In item 16, on page 12 of the office action, claims 1, 10, and 12 – 18 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the teachings of Fujioka (U.S. Patent No. 5,292,849).

As stated previously, the Examiner must present evidence of both (a) some suggestion or motivation to modify the reference or to combine prior-art teachings and (b) a reasonable expectation of success in such a modification or combination. In addition, the reference or references must teach or suggest each feature recited in the claim under consideration.

The Fujioka reference discloses compounds of the general formula (D):



Example 1 of the Fujioka reference discloses the following two compounds, which compounds appear to fall under the general formula (D):



It is clear that neither one of the compounds depicted above are silicic acid polycondensates where the ratio of modified silanediols of the general formula I to organically modified silanes of the general formula II in the resulting silicic acid polycondensate is 1 : 1. The compound depicted above on the left-hand side comprises 15 silanediol moieties, while the compound on the right-hand side comprises 220 silanediol moieties. In short, the Fujioka reference provides no suggestion or motivation for making a silicic acid polycondensate where the ratio of modified silanediols of the general formula I to organically modified silanes of the general formula II in the resulting silicic acid polycondensate is 1 : 1. In addition, the Fujioka reference does not teach or suggest each

feature recited in the claims under consideration because the molecules depicted above comprise 15 and 220 silanediol moieties. Thus, claims 1, 10, and 12 – 18 are not obvious over the teachings of the Fujioka reference. Reconsideration and withdrawal of this rejection are respectfully requested.

XII. Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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